

## Huntington Beach Fire Department

### Flammable and Combustible Liquid Storage Cabinet

Installation and maintenance of flammable and combustible liquid storage cabinets must meet all requirements of Huntington Beach Fire Code (HBFC) Chapter 27 and 34, NFPA 30 Section 6.2, and must be approved for location and installation by the Huntington Beach Fire Department (HBFD).

#### DEFINITIONS

**Boiling Point** – The temperature at which the vapor pressure of a liquid equals the atmospheric pressure of 14.7 pounds per square inch absolute (psia).

**Combustible Liquids** – Liquids having a flash point at or above 100° F. Combustible liquids shall be subdivided as follows:

- **Class II** – Liquids having a flash point at or above 100° F and below 140° F.
- **Class IIIA** – Liquids having a flash point at or above 140° F and below 200° F.
- **Class IIIB** – Liquids having a flash point at or above 200° F.

**Flammable Liquids** – Liquids having a flash point less than 100° F. Flammable liquids are further categorized into a group known as Class I liquids. Class I is subdivided as follows:

- **Class IA** – Liquids having a flash point below 73° F and having a boiling point below 100° F.
- **Class IB** – Liquids having a flash point below 73° F and having a boiling point above 100° F.
- **Class IC** – Liquids having a flash point at or above 73° F and having a boiling point below 100° F.

**NOTE:** The category of flammable liquids does not include compressed gases or cryogenic fluids.

**Flash Point** – The minimum temperature in degrees Fahrenheit at which a liquid will give off sufficient vapors to form an ignitable mixture with air near the surface or in the container, but will not sustain combustion.

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### REQUIREMENTS

#### 1. MAINTENANCE PURPOSES

Flammable and combustible liquids used for **maintenance purposes and the operation of equipment** in excess of 10 gallons shall be stored in a flammable liquid storage cabinet. Quantities not exceeding 10 gallons are allowed to be stored outside of a cabinet when in approved container and locations.

#### 2. GENERAL

2.1 When provisions of the Fire Code require that liquid containers be stored in storage cabinets, such cabinets and storage shall be in accordance with the following:

- Containers for Class I flammable liquids shall not exceed 5 gallons individual capacity.
- The total quantities of all liquids in a storage cabinet shall not exceed 120 gallons.
- Group "A" occupancies shall not contain more than one cabinet.
- Signs shall be posted in storage areas prohibiting open flames and smoking.
- To store, handle or use Class I flammable liquids in excess of 5 gallons in a building or in excess of 10 gallons outside of a building, may require a Fire Department permit (*HBFC Section 105 .6.16 Flammable or Combustible Liquids*).

#### 3. DESIGN & CONSTRUCTION

3.1 Cabinets shall be provided with a conspicuous label in **RED** letters on contrasting background which reads "**FLAMMABLE – KEEP FIRE AWAY.**"

3.2 Doors shall be well fitted, self-closing and equipped with a latch.

3.3 Bottom of cabinets shall be liquid-tight to a height of at least 2 inches.

3.4 Cabinets shall be constructed of approved wood or metal and shall be listed or constructed in accordance with the following:

- **Unlisted Metal Cabinets**
  - Unlisted metal cabinets shall be constructed of steel having a thickness of not less than 0.044 inch (18 gage).
  - The cabinet, including the door, shall be double walled with 1½ inches airspace between the walls.

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- Joints shall be riveted or welded and shall be tight-fitting.
- **Unlisted Wooden Cabinets**
  - Unlisted wooden cabinets, including doors, shall be constructed of not less than 1 inch exterior grade plywood.
  - Joints shall be rabbeted and shall be fastened in two directions with wood screws.
  - Door hinges shall be of steel or brass.
  - Cabinets shall be painted with intumescent type paint.

APPROVED: Original Signed  
Duane S. Olson, Fire Chief

DATE: December 4, 2008